APPLICANT(S): DA SILVA GONCALVES, Fernando

Manuel

SERIAL NO.:

10/561,540

FILED:

August 28, 2006

Page 3

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows:

- 1. (Currently Amended) A process for the reduction of alcohol content of beverages comprising the steps of:
 - a. circulating the beverage from a feed tank, pressurized at a maximum 40 bar, tangentially to a <u>nanofiltration (NF)</u> membrane to obtain two streams:
 - i. one of retentate that does not cross the <u>nanofiltration (NF)</u> membrane,
 - ii. one of permeate that crosses the <u>nanofiltration (NF)</u> membrane and is composed of water, ethanol and salts;
 - b. recombining the retentate in the feed tank with the beverage to be processed;
 - c. distilling the <u>permeate</u> <u>retentate</u>, at atmospheric or reduced pressure, leading to a top stream rich in ethanol and a bottom stream of dealcoholized permeate;
 - d. recombining the dealcoholized permeate in the feed tank with the retentate/beverage;
 - e. totally, or partially compensating for the volume loss due to the removal of ethanol by the addition of purified water.
- 2. (Previously Presented) Process in accordance with claim 1 wherein the membrane is adjusted to allow selective permeation of ionic species according to their charge.
- 3. (Currently amended) Process in accordance with claim 1, wherein the ionic species can be total or partial totally or partially removed from the bottom stream of dealcoholized permeate.
- 4. (Previously Presented) Process in accordance with claim 1, wherein the membrane is regenerated, with 90% minimum flux recovery, by tangential circulation of water at room temperature.

APPLICANT(S): DA SILVA GONCALVES, Fernando

Manuel

SERIAL NO.:

10/561,540

FILED:

August 28, 2006

Page 4

5. (Previously Presented) Process in accordance with claim 1, wherein the membrane is

regenerated, with 90% minimum flux recovery, by tangential circulation of water at a

temperature of 50-60 °C.

6. (Previously Presented) Process in accordance with claim 1, wherein the membranes are

regenerated, with 90% minimum flux recovery, by tangential circulation aqueous solutions of

weak bases, with controlled pH between 8 and 11, as a function of cleaning time.

7. (Currently amended) Process in accordance with claim 6 wherein a pH between 8 and of 9

is used for a long cleaning time of 45 minutes.

8. (Previously Presented) Process in accordance with claim 1, carried out in a continuous or a

batch mode.

9. (Previously Presented) Process in accordance with claim 1, wherein the final product is

obtained by the mixture of the original beverage with beverage treated by this process.

10. (Previously Presented) Process in accordance with claim 1, wherein the final product

presents the same organoleptic characteristic of the original beverage.

11. (Cancelled)

12. (Previously Presented) The process of claim 1, wherein said beverage is wine, beer,

cider, mead or sake.

APPLICANT(S): DA SILVA GONCALVES, Fernando

Manuel

SERIAL NO.: 10/561,540

FILED:

August 28, 2006

Page 5

13. (Previously Presented) The process of claim 10, wherein the organoleptic characteristic is body, flavour, aromatic intensity or aromatic profile.